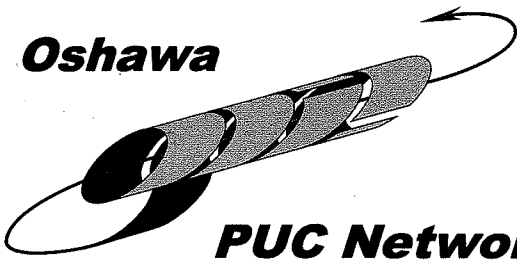


**Oshawa**



**PUC Networks Inc.**

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June 13<sup>th</sup>, 2011

Delivered by Courier and E-mail

Ms. Kirsten Walli, Board Secretary  
Ontario Energy Board  
P.O. Box 2319, 27<sup>th</sup> Floor  
2300 Yonge Street  
Toronto, Ontario  
M4P 1E4

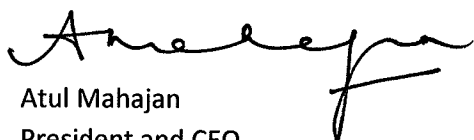
Dear Ms. Walli,

**Re: Addendum to Oshawa PUC Networks Conservation and Demand Management Strategy Board File  
# EB-2010-0215**

As requested by the Board, Oshawa PUC Networks is submitting an amendment to its previously submitted Conservation and Demand Management (CDM) Strategy filed with the Ontario Energy Board on November 1, 2010.

The addendum includes program descriptions for the OPA-Contracted Province-Wide CDM programs that we will be participating in from 2011-2014. It also includes the estimated, prospective budgets for planned OPA-Contracted Province-Wide CDM Programs and Board-Approved CDM Programs.

Yours truly,



Atul Mahajan  
President and CEO

## **Addendum to the Oshawa PUC Networks Inc. Conservation and Demand Management Strategy**

### **Background**

This document responds to a request from the Ontario Energy Board to supplement the filing by Oshawa PUC of a strategy for meeting energy and demand reduction targets over the period from 2011 to 2014. The supplement provides a preliminary budget for the Oshawa PUC programs. In addition to the budget itself, the methodology that was used is described and some of the constraints and limitations are identified.

On March 31, 2010, the Minister of Energy issued a directive to the Ontario Energy Board instructing the OEB to establish electricity conservation and demand management ("CDM") targets to be met by licensed electricity distributors ("distributors") within the 2011 to 2014 time frame. The directive requires the OEB to make meeting CDM targets part of each distributor's licence requirement, and specified some of those requirements.

The energy savings and demand reductions to be realized by the LDCs were to be achieved through province-wide programs being designed by the Ontario Power Authority, and – if necessary – these may be supplemented by additional programs offered by the LDCs with Board approval (Board Approved Programs or BAPs). BAPs may be offered by individual LDCs or groups of LDCs working together.

On June 22, 2010 the OEB issued a *Notice of Proposal to Issue a New Code: Creation of the Conservation and Demand Management Code for Electricity Distributors* and invited comments from LDCs and other interested parties. At the same time, the OEB released a methodology for allocating the provincial targets across LDCs that had been developed by the Ontario Power Authority.

On September 16, 2010 the OEB issued the final code entitled *Conservation and Demand Management Code for Electricity Distributors*.

On October 28, 2010, Oshawa PUC submitted its CDM strategy to the Ontario Energy Board.

On November 12, 2010, the Board posted updated CDM targets for each LDC. Updates were minor and Oshawa PUC's CDM targets went from 13 MW of summer 2014 peak demand and 53 GWh of energy savings to 12.52 MW and 52.24 GWh.

In accordance with the Code which states that budgets are to be provided *where available* (Section 2.1.1 b and Section 5.1 d), budgets were not included since these were unavailable. Given that the OPA asserted that its programs would cover 91% of the provincial energy target and 78% of the provincial 2014 demand reduction target, most of the budget is expected to be associated with OPA programs and there was not information available to Oshawa PUC from the OPA about the budgets for its programs.

Also on November 12, 2010, Oshawa PUC received a letter from the Board Secretary with the following direction from the Board:

The Board directs Oshawa PUC Networks Inc. ("Oshawa") to file an addendum to its CDM Strategy that contains program descriptions for the OPA-Contracted Province- Wide CDM Programs it plans to participate in from 2011-2014.

The Board also directs Oshawa to file, within the addendum to its CDM Strategy, estimated, prospective budgets for planned OPA-Contracted Province-Wide CDM Programs and Board-Approved CDM Programs. Budgets associated with the OPA's low-income program do not need to be included. When developing the estimated, prospective budgets, Oshawa may use a methodology of its choice. For example, the approach used by Hydro One Networks Inc. or Toronto Hydro-Electric Systems Limited. Alternatively, Oshawa may choose to use information arising from the finalization of the OPA's funding formula. Regardless of the methodology used, the addendum must be filed no later than 21 days after the finalization of the OPA's funding formula.

On December 24, 2010, Oshawa PUC received an email from the Electricity Distributors Association ("EDA") providing it with its four-year program administration budget ("PAB"). PAB funding for 2011-2014 is shown in Table A-1.

Table A-1. Four-year PAB funding for planned OPA-contracted CDM programs.

| <b>OPA Program</b>         | <b>PAB funding amount</b> |
|----------------------------|---------------------------|
| Consumer                   | \$1,103,082               |
| Commercial / Institutional | \$1,155,239               |
| Industrial                 | \$164,441                 |
| Total four-year PAB        | \$2,422,762               |

The PAB is but one of five funding components Oshawa PUC expects to receive to support its delivery of 2011-2014 OPA program offerings. The five funding components as follows:

- Program administrative budget (“PAB”)
- Capability Building Funding (“CBF”)
- Participant Based Funding (“PBF”)
- Customer Incentives (“CI”)
- Cost Efficiency Incentive (“CEI”)

The preliminary budget outlined in this addendum to Oshawa PUC’s CDM Strategy covers four of the funding components: PAB, CBF, PBF, and CI. The CEI is an incentive given to LDCs for efficient use of program funding and so is not considered in the proposed preliminary budget.

#### **Participation in OPA’s province-wide programs**

Oshawa PUC is committed to participating in the province-wide programs that have been developed by the Ontario Power Authority (OPA) and has signed the relevant schedules. The programs it will provide to its customers include:

#### **Residential program initiatives**

##### *Residential new construction and major renovation initiative*

Incentives are available to builders and renovators of single-family homes that are energy efficient, smart and integrated (and achieve performance ratings such as EnerGuide 83 or better). Incentives will cover all-off switches, ECM motors, SEER 15 CAC, and EnergyStar light fixtures. Homebuilders and renovators of single-family homes who have completed work between Jan. 1, 2011 and Dec. 31, 2014 are eligible.

##### *Conservation coupon booklet initiative*

Instant-rebate coupons are available for energy-saving products by direct-mail, online or at the Oshawa office. Coupons are redeemable at retailers for eligible energy efficient measures.

##### *HVAC incentives initiative*

Residential and business (with residential-type systems) customers who are replacing an existing HVAC system are eligible for this initiative. Eligible customers hire participating contractors to replace an existing HVAC system. Eligible replacements include:

1. Qualified central air conditioning (CAC) system can be replaced with one that is EnergyStar qualified (14.5 SEER) for CAC systems, or a stand-alone CEE “Tier 2” level (15+ SEER) CAC, or a heat pump
2. An existing furnace can be replaced with a high efficiency furnace with a fully variable speed ECM, or an air handler with a fully variable speed ECM.

Participants then receive an incentive cheque from the OPA.

*Appliance retirement initiative*

Residential customers book appointments online or over the phone for free pick-up and recycling of eligible fridges or freezers. Fridges or freezers in working condition that are 15 years or older and between 10-27 cubic feet are eligible. Window air conditioners and dehumidifiers that are 10 years or older can also be removed and decommissioned, if a standard sized fridge or freezer is also being picked up.

*Appliance exchange initiative*

In this initiative, residential customers exchange window AC or portable dehumidifiers that are working and at least 10 years old for a \$50 instant rebate coupon for a new EnergyStar qualified window air conditioner or dehumidifier (Spring event) or a \$25 retailer gift card (Fall event).

*Home energy assessment tool initiative*

Customers conduct an on-line, virtual energy assessment of their home. This audit provides customized recommendations, where applicable, on how energy consumption can be reduced. Customers receive customized information about the home's electricity use and learn different ways to reduce or better-manage the home's electricity use.

*Midstream electronics initiative*

This initiative offers incentives to retailers of TVs and set-top boxes who encourage customers to purchase energy efficient models. Retailers of energy efficient TVs and set-top boxes within Oshawa's service territory are eligible.

*Midstream pool equipment initiative*

This initiative offers incentives to retailers of pool pumps who encourage customers to purchase energy efficient models and models that are properly sized for the pool. Retailers of pool pumps within Oshawa's service territory are eligible.

**Business program initiatives**

*Energy Audit*

This initiative offers incentives for audits or studies (up to 50% of total cost) to identify energy-saving opportunities to general service customers. Audits must be completed by a professional engineer, Certified Engineering Technologist, or Certified Energy Manager. Opportunities include equipment replacement, operational practices, demand response and building systems and envelope upgrades.

### *Retrofit Program*

This initiative offers incentives of up to 50% of project costs for retrofits to improve energy efficiency (minimum of 2000 kWh per project) or decrease peak demand (minimum of 1 kW per project) for all general service customers. There are three streams to this initiative. Prescriptive stream allows the participant to select measures from a list. Engineered stream uses preset calculation worksheets to select measures and the Custom stream covers measures not included in prescriptive or engineered streams.

### *Direct Install Lighting & Water Heating*

This initiative offers a direct-install of free lighting and water heating measures (up to \$1000) for <50 kW customers. Commercial, institutional and agricultural facilities are eligible, as are multi-family buildings.

### *Direct Service Space Cooling*

This initiative offers free servicing of air conditioning systems and refrigeration units, up to \$750 per facility. Owners and tenants of commercial, institutional, agricultural and multi-family buildings are eligible.

### *High Performance New Construction*

This initiative offers incentives for builders and their design decision-makers (e.g. architects, consulting engineers) who are building, or are significantly renovating such that occupants must vacate the building. Industrial, commercial, institutional or multi-unit residential buildings that exceed the building code are eligible. The focus of this initiative is on major renovations.

### *Existing Building Commissioning*

This initiative offers incentives for general service >50kW and large users (with a water chiller) to hire a Commissioning Agent to conduct a scoping study, investigate options, and implement measures (e.g. devices, software) to improve the efficiency of existing chillers. Incentives are offered for each step of the process.

## **Industrial program initiatives**

### *Process & Systems*

This initiative offers industrial customers incentives for engineering studies to identify electricity saving opportunities, and process and system upgrades. Participating companies contractually commit to achieve targets within a set period of time and to maintain them over the term of the contract. As part of this initiative, ongoing support can include energy monitoring and targeting, energy managers, Key Account Managers and access to a metering and instrumentation library. Incentives and enabling initiatives include \$200/MWh for one-year annualized savings, up to \$10,000 for pre-feasibility studies and up to \$50,000

for feasibility studies. Industrial and business customers of Oshawa who have interruptible loads are eligible.

#### *Demand Response 1 and 3*

Customers are notified of peak demand times and can receive payments when they reduce their loads during these times. DR 1 customers are not penalized for non-performance. DR 3 customers will be penalized for non-performance. DR 3 customers are on standby for 1600 hours per year and are activated 100 or 200 hours per year. Non-residential customers with facility peak demand greater than 50 kW who have an interval meter providing hourly data are eligible. The average approximate incentive for DR 1 participants is \$20,000 per year. For DR 3 participants the average approximate incentive is \$110,000 per year. Participants in DR 1 will be encouraged to enroll in DR 3.

#### **Low-income programs**

Oshawa PUC expects to offer the low-income program as well, when it is launched. This program is expected to address weatherization, and replacement of major appliances.

#### **Residential and small commercial demand response**

The OPA also expects to launch a new demand response program for residential customers in the future, and Oshawa PUC will participate in that program. Until that is ready, Oshawa PUC will continue to offer the *peaksaver* program. In this initiative, Oshawa PUC installs a programmable thermostat which can be remotely control the customer's CAC at no charge to the customer. The device allows the CAC to receive a signal that will cycle it on and off for 15-minute intervals during peak demand times on weekdays (likely 1-6pm). There is a maximum of 10 activations per year. Participants receive \$25 for enrolling and can opt out for a particular time (i.e. special event at home). Residential and small-business (<50 kW) customers of Oshawa who have a central air conditioner (CAC) are eligible.

#### **Preliminary budget**

To respond to the direction from the Board, Oshawa PUC has prepared an estimated, prospective budget for planned OPA-Contracted Province-Wide CDM Programs and any potential Board-Approved CDM Programs. The estimated budget requirement by Oshawa PUC to meet its target is \$15,325,000, of which \$9,970,000 is for OPA-Contracted Province-Wide CDM Programs and \$5,355,000 is for potential Board-Approved Programs. Details are provided in Table A-2.

Table A-2. Breakdown of prospective budget for planned OPA-contracted and potential Board-approved CDM programs.

| <b>Program</b>         | <b>Program total</b> |
|------------------------|----------------------|
| OPA Industrial Program | \$2,839,000          |
| OPA Business Program   | \$4,653,000          |
| OPA Consumer Program   | \$2,478,000          |
| OPA Low-income Program | NA                   |
| OPA Program subtotal   | \$9,970,000          |
| BAP subtotal           | \$5,355,000          |
| Portfolio total        | <b>\$15,325,000</b>  |

### Methodology

The budget estimates in Table A-2 were developed using the following methodology:

1. Estimate the avoided costs associated with OPA-Contracted Province-Wide CDM Programs, using the Resource Tool provided by the OPA. The tool was populated using the rollout strategy found in Table 1 of Oshawa PUC's CDM Strategy filed October 28, 2010 in conjunction with the total 2011-2014 energy savings and 2014 summer peak demand savings also found in Oshawa PUC's CDM strategy. Avoided costs are considered as the main benefit (if not the only benefit) that is considered in the Program Administrator Cost (PAC) test and the TRC test.
2. Estimate the size of the program budget that is reasonable to run the OPA programs and thus achieve the avoided energy costs. This estimate considers that the total program costs must be less than the total avoided costs if the program is to have any net TRC or PAC benefit. The size of the budgets submitted by Toronto Hydro and Hydro One was also considered in setting the budget (after scaling them back proportionally to the size of Oshawa PUC's CDM targets).
3. For each of the three OPA programs (consumer, business and industrial), split the budget estimated in step 2 into the amount that should be allocated to the OPA and the amount that should be allocated to Oshawa PUC. The split for each program is based on values reported by Hydro One Brampton in its strategy.
4. For the Board-Approved program budget, determine the budget using the BAP energy and demand savings required to meet the CDM targets and "standard" unit costs for demand and for energy savings. These standard



unit costs were based on unit costs estimated from the avoided costs and savings from OPA programs.

### Constraints and limitations

These budget estimates are believed to provide an indication of the scale of the resources required to meet the targets specified for Oshawa PUC. However, as is clear from the discussion above, they are based on financial constraints imposed (primarily the PAC test, though the TRC test must also be passed) and broad scale assessments of reasonable costs, not budgeting for the specific technologies and programs that will be implemented.

As for potential Board-Approved programs, program specific budgets will be estimated, and will form part of the application for those programs, should Oshawa feel the need for such programs.

Those final numbers may be higher or lower depending on such factors as:

- The specific technologies and measures to be implemented, and their benefits, and therefore the incentive levels that may be needed
- The details of the program designs, and the costs of delivering the programs
- The ability to meet 'typical' costs in the Oshawa PUC's service area
- The possible need for the programs to exceed energy targets in order to meet demand targets (or vice versa)
- The 'lumpiness' of technologies or programs; it may be impossible or impractical to exactly scale a technology or program to the specific target.

Oshawa PUC expects to report on progress relative to budget in its annual reports, and to advise on what, if any, adjustments are required to ensure that the targets that have been set for it are met, as are customer demands for CDM.